Reply to Office Action Dated: July 6, 2006

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Canceled) A continuous fluid filtration device, comprising:

filtration cells each having an opening towards its top through which they are

supplied with fluid to be filtered, the cells being fitted with a filter bed which, in the filtration

position of the cells allows passage of a filtrate and retention of a filtration cake, and a

bottom;

the cells being disposed in a carousel around a rotation axis and each cell arranged so

as to be able to pivot about a tilt axis tangential to a horizontal circle having the rotation axis

as its centre;

means for supporting the filtration cells so that each cell can perfonn a revolution

about the rotation axis;

means for driving the filtration cells in revolution about the rotation axis;

means for moving the filtration cells to cause a tilting movement thereof about their

tilt axis, during their revolution about the rotation axis; and

means for discharging the filtrate from the cells comprising at least one outlet orifice

at the bottom of each cell, a central collector which is centrally arranged within the fluid

filtration device, and connection means which connect said central collector with said at least

one outlet orifice at the bottom of each cell in said filtration position and during said tilting

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movement of each cell and allow a flow of the filtrate between said at least one outlet orifice

and said central collector,

said connection means for each cell comprising a flexible conduit in which, in the

filtration position of the cell, no area of the flexible conduit is lower than another area of this

conduit situated downstream with respect to the flow of the filtrate, the flexible conduit being

arranged so as not to undergo any elongation during the tilting of the cell.

2. (Canceled) A device according to Claim 1, characterised in that, in a radial section

passing through the device, the flexible conduit in the filtration position of the cell extends

downwards from an outlet orifice along a substantially vertical axis and then, at a height

lower than the tilt axis, is angled in the direction of the collector so as to continuously have a

downward slope, and in that the flexible conduit in tilting position of the cell extends

substantially horizontally from the outlet orifice as far as the tilt axis, and is then angled in

the direction of the collector.

3. (Currently amended) A device according to Claim 21, characterised in that

the tilt axis is supported in at least one bearing having a first outside diameter DI, in that the

flexible conduit has a second outside diameter D2 and in that the distance between the tilt

axis and the substantially vertical axis of the flexible conduit is equal to or greater than 0 and

less than or equal to DI + D2.

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4. (Currently amended) A device according to Claim 2Claim 21, characterised in that the

substantially vertical axis is, in the said radial section, situated between the tilt axis and the

rotation axis.

5. (Original) A device according to Claim 3, characterised in that the substantially

vertical axis is, in the said radial section, situated between the tilt axis and the rotation axis.

6. (Currently amended) A device according to Claim 1 Claim 21, characterised in that

each cell is supported on a shaft coaxial with the tilt axis so as to be able to pivot about this

axis.

7. (Currently amended) A device according to Claim 2Claim 21, characterised in that

each cell is supported on a shaft coaxial with the tilt axis so as to be able to pivot about this

axis.

8. (Currently amended) A device according to Claim-1 Claim 21, characterised in that

each cell is supported on two shaft ends coaxial with each other and coaxial with the tilt axis

so as to be able to pivot about this axis.

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(Currently amended) A device according to Claim 2Claim 21, characterised in that

each cell is supported on two shaft ends coaxial with each other and coaxial with the tilt axis

so as to be able to pivot about this axis.

10. (Original) A device according to Claim 3, characterised in that each cell is supported

on two shaft ends coaxial with each other and coaxial with the tilt axis so as to be able to

pivot about this axis.

11. (Currently amended) A device according to Claim 1Claim 21, characterised in that it

comprises a support for each flexible conduit which turns about the rotation axis

simultaneously with the filtration cells.

12. (Currently amended) A device according to Claim 2Claim 21, characterised in that it

comprises a support for each flexible conduit which turns about the rotation axis

simultaneously with the filtration cells.

13. (Original) A device according to Claim 3, characterised in that it comprises a support

for each flexible conduit which turns about the rotation axis simultaneously with the

filtration cells.

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14. (Currently amended) A device according to Claim 1Claim 21, characterised in that

the collector is connected to a source of negative pressure which the flexible conduits

connected to the filtration cells in the filtration position communicate to them, below their

filter bed, and in that the collector is also a distributor connected to a source of pressurised

gas which the flexible conduits connected to the filtration cells in the tilted position

communicate to them, in order to assist with the detachment of the filtration cake from the

filter bed.

15. (Currently amended) A device according to Claim 2Claim 21, characterised in that

the collector is connected to a source of negative pressure which the flexible conduits

connected to the filtration cells in the filtration position communicate to them, below their

filter bed, and in that the collector is also a distributor connected to a source of pressurised

gas which the flexible conduits connected to the filtration cells in the tilted position

communicate to them, in order to assist with the detachment of the filtration cake from the

filter bed.

16. (Original) A device according to Claim 3, characterised in that the collector is

connected to a source of negative pressure which the flexible conduits connected to the

filtration cells in the filtration position communicate to them, below their filter bed, and in

that the collector is also a distributor connected to a source of pressurised gas which the

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flexible conduits connected to the filtration cells in the tilted position communicate to them,

in order to assist with the detachment of the filtration cake from the filter bed.

17. (Currently amended) A device according to Claim 1 Claim 21, characterised in that

the aforementioned tilting movement means comprises a roller arranged on each cell so as to

be able to turn freely about a pivot axis, and a guide rail arranged fixedly at one point on the

filtration device so as to receive the roller of each driven filtration cell and to guide it so as to

cause the said tilting movement of the cell.

18. (Original) A device according to Claim 17, characterised in that the pivot axis of each

roller is situated in a plane passing through the rotation axis of the device and perpendicular

to the tilt axis of the filtration cell corresponding to the roller.

19. (Original) A device according to Claim 17, characterised in that the roller is carried

by the cell at an internal end thereof.

20. (Original) A device according to Claim 17, characterised in that the guide rail is

disposed above the filtration cells so as to form a U in a plan view, comprising a central part

and two lateral branches, the filtration surface of the cell being in an approximately vertical

position when the roller reaches the central part of the U.

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(Currently amended) A continuous fluid filtration device, comprising: 21.

filtration cells each having an opening towards its top through which they are

supplied with fluid to be filtered, the cells being fitted with a filter bed which, in the filtration

position of the cells allows passage of a filtrate and retention of a filtration cake, and a

bottom;

the cells being disposed in a carousel around a rotation axis and each cell arranged so

as to be able to pivot about a tilt axis tangential to a horizontal circle having the rotation axis

as its centre;

means for supporting the filtration cells so that each cell can perform a revolution

about the rotation axis;

means for driving the filtration cells in revolution about the rotation axis;

means for moving the filtration cells to cause a tilting movement thereof about their

tilt axis, during their revolution about the rotation axis; and

means for discharging the filtrate from the cells comprising at least one outlet orifice

at the bottom of each cell, a central collector and connection means allowing flow of the

filtrate between the said at least one outlet orifice and the collector;

said connection means for each cell comprising a flexible conduit in which, in the

filtration position of the cell, which is connected at a first end to said outlet orifice and at a

second end to said central collector, the outlet orifice and the flexible conduit being

continuously arranged in a radial section passing through the device during said complete

revolution of said cell with no area of the flexible conduit is lower than another area of this

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conduit situated downstream with respect to the flow of the filtrate, the flexible conduit being

arranged so as not to undergo any elongation during the tilting of the cell, and, in a radial

section passing through the device, the flexible conduit in the filtration position of the cell

extending downwards from ansaid outlet orifice along a substantially vertical axis and then,

at a height lower than the tilt axis, being angled in the direction of the collector so as to

continuously have awith a continuous downward slope, and the flexible conduit in tilting

position of the cell extending substantially horizontally from the outlet orifice as far as the

tilt axis, and being then angled in the direction of the central collector with a continuous

downward slope.